

### Abstract

A current collector effective for reductions in weight and thickness. The current collector produced by forming a conductive layer having a surface electric resistance not higher than  $1.3 \Omega/\text{cm}$  on the surface of a resin film and then forming an electrolytic plating layer having a thickness of at least  $0.3 \mu\text{m}$  per one side, characterized in that the surface electric resistance is not higher than  $40 \text{ m}\Omega/\text{cm}$  after electrolytic plating and following expression is satisfied;  $Y1+Y2+Y3 \leq 0.8 \times ((X1+X2+X3) \times Y3/X3)$  where,  $X1$ : thickness of resin film ( $\mu\text{m}$ ),  $X2$ : thickness of conductive layer ( $\mu\text{m}$ ),  $X3$ : thickness of plating layer ( $\mu\text{m}$ ),  $Y1$ : weight of resin film ( $\text{mg}/\text{cm}^2$ ),  $Y2$ : weight of conductive layer ( $\text{mg}/\text{cm}^2$ ), and  $Y3$ : weight of plating layer ( $\text{mg}/\text{cm}^2$ ).